

CITY OF BEAVERTON GIS Analyst

General Summary

Develop, coordinate and implement broad and complex Geographic Information Systems (GIS) applications, databases, maps, statistics, and automation. Perform complex analysis on geospatial and tabular data.

Key Distinguishing Duties

Overall responsibility for designing, developing and implementing GIS applications.

Essential Functions

Depending upon assignment, the incumbent may perform a combination of some or all of the following duties, which are a representative sample of the level of work appropriate to this class.

1. Design, develop and implement GIS applications. Apply multiple programming languages to develop and integrate GIS components into other applications. Test and debug GIS programs.
2. Assist in the design, development, implementation, use and maintenance of City-wide GIS databases and applications.
3. Perform geo-database design, development, and administration duties. Migrate data. Administer permissions, structure, and topologies. Coordinate integration of geo-database-stored information into existing and new applications.
4. Coordinate with Information Systems to ensure the operation of GIS operating systems and servers.
5. Evaluate new software and recommend implementation strategies. Research trends and technologies related to GIS.
6. Analyze complex user requirements, design, develop and implement solutions.
7. Manage projects. Develop detailed design specifications, definitions, diagrams, performance criteria and testing methods.
8. Write, develop and document operational procedures. Devise schedules of GIS application implementation. Prepare progress reports and revise projections to reflect current status.
9. Provide training and technical guidance to users and staff.

10. Research, review, and prepare source documents for data entry.
11. Participate in the development of city-wide and departmental GIS plans.
12. Maintain advanced technical knowledge in current GIS applications and theory. Maintain skill in the use of development tools.
13. Participate in section operational processes including staff selection, budget preparation/monitoring, policy/procedure development and implementation.
14. Provide excellence in internal and external customer service. Create a positive experience for customers through professional and courteous behavior and creative problem resolution. Focus on producing high quality results.
15. Produce an acceptable quantity and quality of work that is completed within established timeline.
16. Represent the City to the public in operational functions as required. Advance and protect the interests of the City and its citizens in all matters.
17. Develop safe work habits and follow all required safety policies, procedures and techniques. Contribute to safety of self, co-workers and the general public.
18. Participate in the City Emergency Management program including classes, training sessions and emergency events.
19. Follow standards as outlined in the Employee Handbook.
20. Support and respect diversity in the workplace.

Other Functions

1. Serve on or provide support to a variety of committees, task forces and advisory groups as necessary.
2. Perform related duties of a similar scope and nature.

Knowledge Required

- ◆ Advanced knowledge of the practices and principles of Geographic Information Systems (GIS).
- ◆ Advanced knowledge of GIS applications, programming languages and development tools.
- ◆ Advanced knowledge of principles and practices of cartography and geography.
- ◆ Strong knowledge of geo-database structures, design, development, use and maintenance.
- ◆ Strong knowledge of tools and systems used to develop, design and publish web-based, data-driven applications, including design/graphics/layout software.
- ◆ Strong knowledge of application development processes in a web-based environment.
- ◆ Strong knowledge of the usage of web applications and web sites.

- ◆ Strong knowledge of principles and practices of database structure, design and management.
- ◆ Strong knowledge of principles and practices of computer and web programming.
- ◆ Advanced knowledge of GIS software in common use in our region.
- ◆ Advanced knowledge of the practices and principles of database structures, design and database management.
- ◆ Strong knowledge of principles and practices of statistical analysis for GIS.
- ◆ Strong knowledge of information services technology.
- ◆ Working knowledge of the laws and regulations governing web publishing.
- ◆ Working knowledge of principles and practices of project planning and management.
- ◆ Working knowledge of research methods and report preparation.
- ◆ Working knowledge of the laws and regulations governing database management.
- ◆ Working knowledge of principles and techniques of training.
- ◆ Working knowledge of practices and principles of public/business administration and decision-making.
- ◆ Working knowledge of strategic planning methods with an emphasis on services related to GIS programs.
- ◆ Working knowledge of public purchasing and contracting laws and regulations.

Skills/Abilities Required

- ◆ Strong ability to use web development tools and programming languages.
- ◆ Expert ability to use word-processing, spreadsheet programs or other application software.
- ◆ Expert ability to review, analyze, customize and implement software packages and applications.
- ◆ Expert ability to write documentation.
- ◆ Strong ability to communicate effectively both orally and in writing with internal and external customers.
- ◆ Advanced ability to perform highly complex analysis and integration of data.
- ◆ Strong skill in managing multiple tasks, projects and priorities.
- ◆ Strong ability to collaborate with GIS users and the public.
- ◆ Strong ability to research, learn and implement new Web tools and technologies.
- ◆ Strong skill in conceptual analysis and policy/program development and implementation.
- ◆ Strong ability to provide technical leadership to GIS staff.
- ◆ Strong ability to apply excellent internal and external customer service skills.
- ◆ Strong ability to define software development standards and templates.
- ◆ Strong ability to productively manage and/or participate on a team
- ◆ Ability to develop a team approach to producing high quality results.
- ◆ Strong ability to demonstrate leadership behavior to employees, contractors, public officials, other agencies, customers and the general public.
- ◆ Strong ability to establish and maintain effective working relationships with employees, contractors, other agencies, public officials and the general public.
- ◆ Strong ability to communicate effectively both orally and in writing with diverse customers, employees, contractors, other agencies, public officials and the general public.
- ◆ Strong ability to make presentations and develop reports that may include technical information.

Minimum Qualifications Required for Entry

Bachelor's degree in Geography, Business, Planning, Computer Technology, or related field and 3 to 5 years experience in GIS analysis and database management including at least 2 years of GIS programming and application development or an equivalent combination of education and experience enabling the incumbent to perform the essential functions of the position.

Licensing/Special Requirements

- ◆ Positions in this classification are required to possess a valid driver's license and the ability to meet the City's driving standards.

Working Conditions

Regular focus on a computer screen; daily use of a keyboard or similar device; occasional dealing with distraught or difficult individuals; occasional attendance at meetings or activities outside of normal working hours; occasional operation of a motor vehicle on public roads.

Classification History

Classification created: October 2000

Revised:11/04

Revised:1/1/09

Status: SEIU

FLSA: Non-exempt

Department Head Signature

Human Resources Signature

Date

Date